

WHAT IS CLAIMED IS:

1. A method for measuring a plasticity of a material such as a ceramic raw material or mass, the method comprising the steps of:

(a) deforming a sample body by impacting said sample body with a weight;

(b) measuring a movement of said weight over time during a deformation of said sample body;

(c) generating a path signal based on said movement of said weight, wherein said path signal is proportional to said deformation of said sample body;

(d) measuring a reaction force of said sample body over time during said deformation of said sample body;

(e) generating a force signal, wherein said force signal is proportional to said reaction force; and

(f) processing and evaluating said path signal and said force signal with a computer.

2. The method according to claim 1, further comprising the step of dropping said weight onto said sample body from a pre-determined height.

3. The method according to claim 2, wherein said weight impacts said sample body in a free fall.

4. The method according to claim 1, wherein said weight impacts said sample body at a regulated speed.

5. A device for measuring a plasticity of a material such as a ceramic raw material or mass by impacting and deforming a sample body with a weight and measuring a movement of the weight and a reaction force of the sample body over time during a deformation of the sample body, the device comprising:

(a) a force measurement device for measuring the reaction force of the sample body during the deformation;

(b) a sample table disposed on said force measurement device;

(c) a guide disposed above said sample table wherein

said guide is for guiding the weight which impacts the sample body; and

(d) a path sensor for detecting a movement of the weight;

wherein a path signal which is proportional to the deformation of the sample body is generated based on the movement of the weight, a force signal which is proportional to the reaction force is generated and said path signal and said force signal are measured and evaluated.

6. The device according to claim 5, further comprising a computer coupled to said force measurement device and said path sensor.

7. The device according to claim 5, wherein said force measurement device comprises a load cell.

8. The device according to claim 7, wherein said load cell is inherently resilient.

9. The device according to claim 7, further

comprising a separate spring system comprising a transducer, wherein said load cell is mounted on said separate spring system.

10. The device according to claim 5, wherein said guide comprises a linear guide.

11. The device according to claim 5, wherein said guide comprises a lever, wherein the weight is disposed on said lever and said lever is rotatable about an axis of rotation.

12. The device according to claim 11, wherein a height of said axis of rotation is adjustable.

13. The device according to claim 5, wherein said guide comprises a lever having a parallelogram guide.

14. The device according to claim 5, wherein said guide comprises a scissors system.